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ABSTRACT

This monograph describes the Curriculum Inquiry Cycle (CIC), focusing on the first phase. The CIC is a professional development process that supports educators in making curriculum and instruction decisions responsive to state standards, local needs, and student characteristics. The process is designed to improve learning and teaching, with the classroom as the central focus. There are four phases in the CIC: Examining Current Practice; Making Decisions; Creating Optimal Learning Environments; and Researching Our Classrooms. Teams of teachers and administrators from a school or district engage in the CIC either onsite during the school year, in a 5-day summer institute, or in a combination of the two. This monograph presents an overview of the CIC, an introduction to the subject, a discussion of the CIC, and a focus on the first phase of the cycle: Examining Current Practice. This phase invites teachers into conversation with colleagues about the ways that they support student learning in their classrooms. The monograph presents an overview of seven activities for examining current practice: metaphors for teaching; changing core educational practice; exploring ideas about learning; snapshots of other teachers' practice; team sharing of current classroom practice; team belief statements; and exploring current theory and research on learning. An appendix offers participant handouts for the pre-workshop activity and the seven workshop activities. (Contains 11 references.) (SM)

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The Curriculum Inquiry Cycle:

Improving Learning and Teaching

Examining Current Practice

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The Curriculum Inquiry Cycle:

Improving Learning and Teaching

Examining Current Practice

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Overview of the Curriculum Inquiry Cycle

What is it?

The Curriculum Inquiry Cycle is a professional development process that supports educators in making curriculum and instruction decisions responsive to state standards, local needs, and student characteristics. Its focus is the classroom. There are four phases in the cycle: Examining Current Practice, Making Decisions, Creating Optimal Learning Environments, and Researching Our Classrooms.

The goal of the Curriculum Inquiry Cycle is to create a self-sustaining process, applicable to all areas of the curriculum, for improving learning and teaching.

How does it work?

Teams composed of teachers and administrators from a school or district engage in the Curriculum Inquiry Cycle either onsite during the school year, in a five-day summer institute hosted by NWREL, or in a combination of summer institute and onsite follow-up. Individual needs and interests will vary: Teams who wish to experience the full cycle may find the summer institute and follow-ups most beneficial; other teams may wish to use selected phases of the model onsite, to support curriculum renewal work already under way.

What will be gained from the process?

Participants will:

- Learn a team approach to curriculum inquiry that supports curriculum planning and instructional design
- Plan strategies to involve other staff (and, as desired, students, parents, and community members) in the process
- Analyze current curriculum and instruction in light of 1) teacher beliefs about learning; 2) models of curriculum; and 3) national, state, and local standards (*Examining Current Practice*)
- Develop shared understandings and set priorities for effective, engaging curriculum and instruction in a content area (*Making Decisions*)
- Determine critical learning experiences to ensure student achievement of agreed-upon goals (*Creating Optimal Learning Experiences*)
- Decide teaching/learning questions to study in classroom settings and design a process for sharing findings (*Researching Our Classrooms*)
- Develop guidelines for local curriculum documents, decisionmaking processes, and classroom practices.

Where can interested parties get more information?

NWREL Curriculum and Instruction Services staff, Dr. Jane Braunger and Dr. Maureen Sherry Carr, can answer questions about the Curriculum Inquiry Cycle and can help plan onsite use of the model appropriate to school and district needs. They can be reached at NWREL, 101 S.W. Main St., Suite 500, Portland, OR 97204, fax (503) 275-9584. Dr. Braunger can be reached by e-mail at braungej@nwrel.org, or by phone at (503) 275-9588. Dr. Carr can be reached by e-mail at carrm@nwrel.org, or by phone at (503) 275-0441. Information on the Curriculum Inquiry Cycle is also available on NWREL's Web site (http://www.nwrel.org/psc/ci/).

Introduction

Curriculum reform organized around high standards, and the application of these standards to "all students," presents a challenge to educators. There is an expectation that students will reach higher levels of literacy, develop a deeper understanding of subject matter, become technologically sophisticated, and achieve the capacity to adapt to ever-changing economic and social conditions (Brown & Campione, 1994). In order to fulfill the promise of optimal achievement for an increasingly diverse student population, we must create different contexts for learning than we have now. Creating classrooms where learning is accessible to all students means that teachers must re-conceptualize ideas about learning, intelligence, motivation, and the overall purpose of schooling in a democratic society. Teachers must examine their assumptions about ability and achievement, about what subjects or topics are worth knowing, about the role of students and teachers in classrooms, and about how these assumptions translate into effective instructional practice.

Reflecting on classroom practice helps to develop insights into the reasons behind our actions. New understandings emerge that lead to conscious choices about the beliefs that govern classroom practice. Inquiry into educational practice can change our world view and allow us to "see schools and students through new eyes" (Buchanan, 1994).

Creating classrooms where learning is accessible to all students means that teachers must re-conceptualize ideas about learning, intelligence, motivation, and the overall purpose of schooling in a democratic society.

NWREL recognizes the importance of supporting teachers in the restructure and redesign of curriculum, instruction, and assessment by providing increased professional development services in curriculum and instruction. Any successful assistance effort must recognize the complexity of teaching and the increased demands that reform efforts have made on teachers' time and energy. Our strategy is to support teachers in helping all students to reach high standards by building on their current curriculum, instruction, and assessment practices.

A primary responsibility of teachers in a standards-based system is to map instructional practice onto a group of content and performance standards so that classroom experiences have a clear focus for students. The curriculum developed in this process is the means by which teachers assist students to meet high expectations (Schalock, Tell, & Smith, 1997). In this context, curriculum has a broad meaning that includes what will be taught, effective ways to make learning accessible to all students, what will be evaluated, and what assessment formats are consistent with educational goals. It is appropriate then that we make curriculum the lens through which we examine teaching practice.

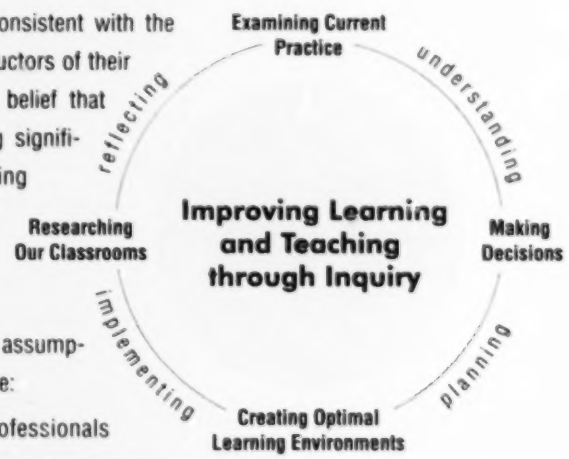
There are many ways of looking at curriculum, but all of these different perspectives are based on a set of deeply held understandings about what is worth knowing, who is at the center of learning, and what is the most effective way to create meaningful learning for learners. If teachers are to assume their rightful responsibility to develop as well as to implement curriculum, it is crucial that they confront these questions to design a curricular framework that meets the needs of the school and classroom context. Through the Curriculum Inquiry Cycle teachers can look deeply into their ideas about the relationship between their conceptions of learning and teaching and the kind of learning that occurs in classrooms.

The Curriculum Inquiry Cycle

The Curriculum Inquiry Cycle is a process designed to improve learning and teaching with the classroom as the central focus. While it is important to have standards, to be clear in our expectations of students, and to check on their progress toward standards, a standards-based system does not guarantee an improvement in student learning. What really counts is what students and teachers do in classrooms every day (Schalock, Tell, & Smith, 1997). Curriculum inquiry involves teachers in determining the critical experiences necessary to engage students in meeting challenging standards. Educators participating in this ongoing cycle of curriculum renewal develop and articulate local standards which guide their teaching in the context of broad state and national reform priorities; examine current curriculum practice in the school or district; clarify local needs, content, and performance standards to determine how to balance competing demands; analyze student outcome data; plan critical classroom experiences to achieve desired student goals; and conduct classroom research on selected practices and educational issues, assessing progress and making needed changes. It is prompted by key questions central to instructional improvement:

- What knowledge is crucial? What do we understand about this knowledge?
- What do we know about how people learn?
- What strategies are most powerful for fostering student learning?
- What critical experiences must occur to achieve standards?
- How do members of the learning community collaborate to provide a coherent and meaningful learning experience?

The Curriculum Inquiry Cycle is consistent with the ideal of individuals as active constructors of their own learning. It is based on the belief that teachers are capable of identifying significant classroom issues, gathering pertinent data, and analyzing and interpreting the results to inform future practice.



The following are the underlying assumptions of the Curriculum Inquiry Cycle:

- Teachers are knowledgeable professionals
- Planning curriculum is the professional responsibility of teachers
- Curriculum inquiry is a vehicle for professional growth
- Curriculum inquiry leads to improved learning and teaching
- Teachers learn by building on current practice
- Teachers need to share professional expertise

- Curriculum planning is a team effort
- Curriculum inquiry strengthens close connections among curriculum, instruction, and assessment
- Curriculum planning is a recursive process
- The classroom is the fundamental unit of school change
- Administrative support is essential for effective curricular and instructional change

A major goal of this NWREL project is to assist teachers and schools to create self-sustaining processes for improving curriculum and instruction. If schools are to improve substantially, teachers need to re-create classroom environments organized around learning principles that we know enhance student learning. Our inquiry process begins with teachers' personal knowledge and experience of learning and teaching. It is crucial that teachers immerse themselves in a study of teaching practice to identify substantive questions that will lead to a deeper understanding of how best to support student learning in a standards-based system.

Key Questions for Examining Current Practice

What does my teaching look like? Why do I work this way? What do I believe about how learning occurs? Is my current practice making a difference in student learning? How do I know (assessment)? Is my teaching consistent with what is known about how people learn? How might some classroom experiences produce different outcomes from those I intend?

Outcomes:

- Extensive analysis of current practice in a chosen content area
- Rich depiction of the teaching and assessment in a specific content area in the school
- Articulation of current goals for student learning
- Identification of teachers' beliefs about learning that drive teaching practice
- Knowledge of current views of learning (constructivist, social interaction, brain compatible learning, etc.)

In order to fully explore teaching practice, two full-day (12 hours) meetings are recommended. This time frame allows an indepth examination of the connection between instructional practice and student learning. The two-day format can be completed in two successive days if preparation activities have occurred prior to the meetings. However, a period of two to three weeks between meetings allows teachers to reflect on the ideas discussed on Day One and to collect and organize information needed in the second session.

Teams may be formed within schools by grade levels or content areas or across grade and content areas. Teams may also be organized on a districtwide basis with teams representing individual schools or curriculum departments. It is important that an administrator be part of the team since administrative support is crucial to carrying through the inquiry process. Participating teams may find it useful to focus their inquiry on a particular subject or discipline.

Examining Current Practice

Inquiry into educational practice within a supportive, collaborative relationship is an effective way to enhance teacher reflection on and for practice. The purpose of this phase of the Curriculum Inquiry Cycle is to invite teachers into conversation with colleagues about the ways that they support student learning in their classrooms. Teachers involved in this process learn about themselves and their students. Teachers look closely at what they do and why, so that they can make decisions about classroom practice that help create the kind of learning places that are stimulating for both students and teachers.

The purpose of this phase of the Curriculum Inquiry Cycle is to invite teachers into conversation with colleagues about the ways that they support student learning in their classrooms.

Teachers' work is inextricably connected to their personal lives, and any study of practice will necessarily include life experiences and background. Classroom practice is based on personally held values and beliefs, even if there is no conscious awareness of these ideas. Teachers, like everyone else, make assumptions about what learning looks like based on their own school experiences. If one learned best by writing and talking with peers about important concepts, then it is likely that, as a teacher, writing and collaborative groups will be an important part of the instructional program. To the degree that these practices are congruent with student needs, the teacher will be successful in helping students to achieve learning goals. If teachers are truly to make informed decisions that result in improved student learning, it is essential to confront these beliefs or theories and to justify them through student-outcome data or substantive research.

Why should teachers examine their beliefs?

Beliefs, like all things that are learned, are stored in long-term memory. The difference between "belief knowledge" and other knowledge relates to the substantial emotional content of beliefs and the willingness to accept this knowledge in the absence of any justification. The difference may also explain how we store beliefs as opposed to how we store our knowledge about historical events or mathematical principles.

Some researchers maintain that beliefs are stored in episodic memory rather than semantic memory (Pajares, 1992). Martindale (1991) compares semantic memory to a dictionary that contains definitions that give meaning to our experiences. However, episodic memory is more like a film or book that ties these bits and pieces of meaning together into a meaningful context (Martindale, 1991). Beliefs stored in episodic memory may be documentaries (factual stories of real events) or docu-dramas (colorful accounts of real events that may tweak facts to support an interesting story).

Like other types of information in memory, beliefs may be organized in networks or clusters. It is possible that if beliefs are stored in episodic memory the networks may not be connected closely within the system. If beliefs exist side by side, so to speak, but there is no interaction between belief structures, then it is possible for individuals to hold conflicting beliefs and be unaware of the inconsistency in the belief system as a whole (Richardson, 1994). For example, one of the

reasons a teacher enters the profession is that she believes good instruction makes the difference in learning. Several students, despite her efforts, are not progressing satisfactorily. The teacher blames lower performance on the disadvantages of living in a poor family. The belief that "disadvantaged" children will not learn as readily as others conflicts with the belief that good instruction makes a difference in learning. Being able to assist all students to achieve high standards may require that this teacher confront this conflict. Another example is a teacher who prides himself on running a research-based classroom but also believes that students learn best when grouped with learners of similar ability. When challenged on this practice which is not supported by research, the teacher maintains that his experience supports continuing the practice. Teachers' classroom experience should not be discounted, but it is suggested that in order for teachers to grow professionally beliefs be examined objectively and logically. Beliefs about learning and teaching should be justified through evidence supporting teachers' ideas (Richardson, 1994).

It is important that teachers be aware of their beliefs about students, learning, and teaching. When teachers make decisions about curriculum and instruction, they should be able to justify their decisions and provide evidence from research and an examination of their own experience of what works. Professional development experiences should assist teachers to get in touch with their implicit theories or beliefs about teaching and learning to form coherent, rational theories based on evidence (Richardson, 1994).

Overview of Activities for Examining Current Practice

Activity One—Team Activity: Metaphors for Teaching

Purpose:

Human beings have unique ways of recording events and feelings in memory. Imagery is one way we create memories of significant experiences in our lives. A special family holiday, the birth of a child, our first day of teaching: these events play across our minds as a virtual-reality experience—all the sights, sounds, smells, and feelings. When we share our life images, we often use figurative language to convey the essence of these memories.

This activity provides an opportunity to explore images of teaching and learning through language and art.

Procedure:

Teams brainstorm ideas about learning and teaching with pictures and words.

After members have identified possibilities, teams come to consensus about the images that represent their ideas. These are graphically illustrated on chart paper.

When the illustration is complete, the team then creates a metaphor that captures the essence of their images of learning and teaching. For example, one image of teaching might be a series of interesting boxes with a jeweler filling each one with a variety of exquisite gems. A metaphor to capture this image might be that teaching is filling empty vessels with pearls of wisdom.

The drawings and metaphors are shared with the whole group.

Activity Two—Changing Core Educational Practice

Purpose:

Richard Elmore indicates that, despite many innovations in education over the past 50 years, what happens in classrooms between students and teachers has not changed in any significant way. What Elmore calls core educational practice has been minimally influenced by major educational reforms. Core educational practice includes:

- How teachers understand the nature of knowledge and the student's role in learning
- How the teacher's knowledge translates into teaching and classroom work
- How the teacher structures the classroom environment (grouping, teacher-student relationships)
- How the teacher assesses and communicates student learning

Elmore maintains that unless we come to consider "inspired, demanding" teaching as a professional norm, students will not reach higher, more sophisticated levels of learning. We have a tendency to think of this kind of teaching as unique to certain individuals, much like hair color or handedness. Elmore calls this the "individual trait" theory of good teaching. This presentation activity engages teachers in thinking and writing about the connection of good teaching to improved student learning.

Procedure:

During this activity the facilitator will share Elmore's ideas about ways to effect lasting change in the classroom. Participants will respond in writing to Elmore's position. Is it accurate? If not, what do they offer as examples of lasting change in classrooms? If so, why do they think so little change occurs?

Teams will share their reactions with the whole group. The information will be recorded. Participants will be exploring theories and beliefs about "core educational practice" as the workshop progresses. As teams examine practice, these initial responses will be re-visited.

Activity Three—The Human Graph: Exploring Ideas about Learning (Schurr, 1992)

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Purpose:

It is important for participants to be able to articulate their beliefs about learning. Sometimes, however, teachers are aware of what they do but have difficulty connecting their classroom actions with a theory or belief about learning. The purpose of the Human Graph experience is to provide stimuli to help relate classroom activity to learning theories and to make some judgments about which theories speak to knowledge of good teaching practice.

Procedure:

Participants are presented with seven statements about how human beings learn. They are asked to agree or disagree with the statement. When they have made a choice they justify their decision in writing. The facilitator asks individuals from each team who agree or disagree with the statement to step forward. Participants then share their rationales with the rest of the group. After all seven have been reviewed, the group generates a list of ideas that everyone seemed to agree with. The idea is to have a list of beliefs or theories about learning with which teams agree. Teams should also think about areas of substantial disagreement. This information is essential as teams later develop goals based on their ideas about what knowledge is important, roles teachers and students play in the learning process, and the most effective ways to make knowledge accessible to learners.

Activity Four—Snapshots of Other Teachers' Practice

Purpose:

Teaching is not just what teachers do. It is often how they define who they are. Therefore, discussing teaching practice may make teachers feel vulnerable and anxious (Goodson, 1993). For this reason, the initial discussion of teaching practices and their attendant beliefs or theories is based on written and video vignettes of classroom practice. After teachers have an opportunity to identify theories implicit in the vignette, they develop a belief statement for the vignette teacher. This process also provides an operational structure for activities that will involve analysis of the participants teaching practice later on.

Procedure:

Vignette # 1 (Written Narrative): Team members read a short vignette and look for the assumptions the vignette teacher may have about learning, about the student's role and the teacher's role in the learning context, and about the goals the teacher might have for learning. What statement can the team make about the teacher's beliefs about learning and teaching? Share with the whole group.

Vignette # 2 (Video): Participants view a video segment that is a "real" example of a classroom in action. During viewing, participants record observations about what the teacher and students are doing and the nature of the physical environment.

After viewing, team members analyze their observations in terms of the teacher's and the students' roles, teacher beliefs about knowledge, and the goals the teacher has for students.

Teams will discuss their observations and analysis and make a statement of beliefs about learning and teaching that would apply to the vignette teacher.

Team analyses are shared with the whole group.

Activity Five—Team Sharing: Current Classroom Practice

Purpose:

As preparation for this workshop, participants complete a reflection on the connections among classroom practice, standards, and student achievement (see Appendix). After completing the reflection form, each team member prepares a brief narrative describing classroom practice. In this activity team members have an opportunity to share their individual portraits of classroom practice.

As a faculty who will be trying to construct or work with a cohesive curriculum that meets the needs of a diverse group of students, teams need time to learn about each other as teachers. This is a time for teams to work together to understand where their ideas come together and where there might be points of departure.

Procedure:

Participants read their narratives of classroom practice to team members. This is not a time to ask questions or seek clarification, but team members will want to jot down possible questions to ask during the discussion session and will find it helpful to note similarities and differences heard during the sharing period.

After team members have had time to share their reflections, the team discusses what was observed and identifies the issues or themes relevant to teaching, learning, and curriculum that emerge. Examples might include student choice, engagement in learning, matching assessment to instruction, teacher content knowledge, etc.

After the team has listened to individual depictions of teaching practice and identified issues and themes that are shared as well as areas of difference, the team writes the Team Portrait of teaching practice based on what emerges as a picture of teaching practice for the whole team. Team Portraits will be used to further examine beliefs about learning and teaching.

Activity Six—Team Belief Statement

Purpose:

Participants have had an opportunity to reflect on actual teaching practice both individually and collectively. It is important now to ferret out the beliefs or theories that form the foundation for teaching practice. Articulating team beliefs about teaching using actual practice as the focus will help participants to connect to more formalized educational theory and research that will be discussed later. It also allows teachers to build a framework for decisions they will be making about curriculum, instruction, and assessment.

Procedure:

Based on the description of team-teaching practice, the group identifies beliefs that might be the basis for these practices. For example, perhaps the team or a member of the team regularly uses small group problem-based projects—what does that say about beliefs about knowledge, about how people learn, about the student's role in learning, and about the teacher's role in learning?

After beliefs have been identified, they are categorized—for example, Beliefs about How Students Learn to Write Effectively, Beliefs about Mathematics Content To Be Stressed, Beliefs about Allowing Student Choice in Curriculum, etc. (The categories will vary with the content under consideration.)

The beliefs are recorded on chart paper. Green marker is used for those beliefs that are shared by the whole group, and red marker for those beliefs that are not unanimously held by the group. This is important information for future curriculum planning. Differences will have to be discussed and conflicts addressed. The group may want to use this data to decide on non-negotiable items—knowledge or activities that are so important for learning that they should be included in all classroom programs. For example, all teachers believe that students

should spend substantial time in class reading good literature or that all students should be able to design an experiment to test a scientific hypothesis, etc.

Activity Seven—Exploring Current Theory and Research on Learning

Purpose:

Teachers sometimes discount theory and research because it often does not speak to the classroom situations that they confront every day. It is not unusual to hear that ideas presented are fine in theory but when they are tried in classrooms with real kids they just don't work. Sometimes this is because the theory or research is based on faulty data and assumptions, and sometimes it is because teachers have not had time to develop an indepth understanding of the theoretical perspectives. As teachers investigate and try to understand their own practice, it is important that they also explore the substantial body of information now available on learning and intelligence.

Procedure:

Participants read and discuss theories of learning and intelligence in a Jigsaw format.

Jigsaw readings are useful for two reasons: Teachers are able to 1) gather information individually and 2) construct meaning for this information in dialogue with peers.

Topics may include brain research, conditions for learning—e.g., Cambourne (1995)—constructivist theory, multiple intelligences, motivational principles, etc.

Participants are assigned to "expert" groups and read selections that will be discussed in these groups. As members read the selections, they might consider: What factors related to learning and teaching are discussed? Do they fit with the participants experience? What examples from classroom experience might illustrate the theory? What questions arise from the reading?

Articles are discussed in expert groups with emphasis on key points to share with teams.

Visuals may be developed to facilitate 'teaching" the information to the team group.

Team groups meet and members present the information they consider the key to understanding the research or theory. Visuals and examples are helpful for this.Whole group sharing follows: Which ideas really clicked? Which ideas are still puzzling? Which ideas would be worth exploring further?

The process of thinking through a question or concern with colleagues can have a profound affect on teachers' professional lives. During this inquiry into practice, teachers have examined their knowledge about learning and teaching and questioned assumptions that are the foundation for their practice. This research into practice helps teachers to re-interpret their experience and gain new understandings that form the basis for decisions to be made about connecting standards to practice, about optimal experiences to improve student learning, and about their

own development as professionals. Examining Current Practice is the phase of the Curriculum Inquiry Cycle that provides the rich background of information that leads into the next three elements of the model: Making Decisions, Creating Optimal Learning Experiences, and Researching Our Classrooms.

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Appendix

Participant Handouts

Pre-Workshop Activity

Individual Reflection on the Connections Among Classroom Practice, Standards, and Student Achievement

Teams will engage in an indepth discussion about classroom practice, and from this discussion teams will develop a written portrait or description of what teaching and learning looks like within and/or across buildings. To prepare for this activity, we ask that each team member complete the Individual Reflection and then, based on the information recorded, write a narrative description of classroom practice. Members are encouraged to make copies of the narrative for team members to use during the workshop discussion.

Note: *Prior to completing the reflection, teams may wish to meet to identify a focus for reflection. For example, if your subject area is reading, team members may focus on standards related to development of comprehension.*

Select a specific subject area as a focus for your reflection, e.g., reading, mathematics.

How much of the classroom day is allotted to this subject? (Consider specifically scheduled instructional time as well as possible integration of the subject area with other parts of the curriculum.)

What percentage of instruction is: Whole group? Small group? Individual?

How are small groups determined (ability, interest, etc.)?

What types of learning activities and materials are used in:

Whole group settings?

Small group settings?

Individual settings?

Review the standards and/or benchmarks for your subject area that are closest to your grade level.

List the benchmarks that you most frequently (almost daily), sometimes (weekly or several times per month), or seldom (rarely happens) incorporate into your instructional program.

Frequently (almost daily)

Sometimes (weekly or several times per month)

Seldom (rarely happens)

Choose one standard and/or benchmark from the list of those you frequently incorporate into your instructional practice.

Describe at least TWO practices that occur in your classroom that move students to the benchmark. Be specific. Include what you do and what the students do. [Example: eighth-grade benchmark in reading is: Analyze and evaluate whether a conclusion is validated by the evidence in a selection. Practice: Students (working in groups of 3) have the results of a small claims court hearing and a narrative describing testimony of three witnesses and physical evidence provided by the plaintiff and the defendant. The task is to read the transcript of the hearing and discuss whether the outcome of the hearing is consistent with the evidence presented and then present the group position to the teacher and the class. The teacher facilitates the class discussion that follows—asking probing questions that require students to justify their positions using data from the reading. Students complete a written reflection on the role of credible evidence when making decisions—they incorporate ideas from the class discussion, small group position paper, and their own experiences.

What evidence do you have that this practice supports students in their efforts to reach the benchmark?

[Using the previous example: small group position paper, teacher observation of student responses during class discussion, student reflection]

(Grade Level)

Standard/Benchmark:

Practice 1:

Evidence:

Practice 2:

Evidence:

About which standards or benchmarks are you most confident that the learning activities you plan definitely move students to high achievement in that area?

About which standards or benchmarks are you less confident that the learning activities you plan definitely move students to high achievement in that area?

Suggested Data Sources for Completing the Pre-Conference Activity

Demographic Data

Attendance/transient population

Limited English-speaking students

Free and reduced lunch

Average class size

Number of students on IEPs

Resources teachers in classrooms

Teacher aides in classrooms

Use of pull-out programs

Print/non-print media (central library, classroom libraries, circulation rate, holdings, etc.)

Technology (computers, video, photographic, etc.) Are computers centrally located, in classrooms, or both?

Services available for children and families

Student Work Samples

Examples of student work that relate to the practices described on the self-report.

Assessment Data

Data from and copies of the statewide assessments in reading and/or mathematics.

Other data: standardized (CTBS, Iowa, etc.) and classroom-based data.

Activity #1

Metaphors for Teaching

The purpose of this activity is to think about and share our images of learning, teaching, and education in general. When decisions are made about the images that depict the team's ideas about learning and teaching, use the paper and markers to draw the image and then post it on the wall to share with other groups.

Things you might consider as you ponder your images:

Purpose:

1. What reasons might your students give for attending school?

2. What drew you to the teaching profession?

3. What are some key words that would characterize your school? (classroom, district)

4. How would you characterize the role of students in your school? Teachers? Administrators? Parents?

5. What metaphor might describe your team's approach to teaching? (e.g., teaching as art and teachers as artists, teaching as gardening and teachers as landscapers, teaching as information science and teachers as information givers, etc.)

Activity #2

Changing Core Educational Practice

"Why do good ideas about teaching and learning have so little impact on U.S. educational practice?"

"Innovations that require large changes in the *core of educational practice* seldom penetrate more than a small fraction of U.S. schools and classrooms, and seldom for very long when they do."

Core of educational practice:

- How teachers understand the nature of knowledge and the student's role in learning
- How these ideas about knowledge and learning are manifested in teaching and in classwork
- The structural arrangements of schools (physical layout of classrooms, student grouping practices, teacher responsibility for students, relationships among teachers in their work with students)
- Processes for assessing student learning and communicating it to students, teachers, parents, administrators, and other interested parties

For the next five minutes please respond to Elmore's statement about innovations. Do you think it is accurate? If not, identify some examples of lasting change in classrooms. If so, why do you think so little change occurs?

A common (and troubling) belief is the "individual trait" theory of good teaching, which says that inspired and demanding teaching is an individual trait (much like hair color or shoe size), not a professional norm.

Harking back to our metaphors for teaching, we might call this "the teachers are born not made" metaphor. Are there any professional development experiences that have had an important impact on the way you work in the classroom? Jot down any that come to mind.

Source: Elmore, R.F. (1996, Spring). Getting to scale with good educational practice. *Harvard Educational Review, 66*(1), 1-26.

Activity #3

Human Graph (Schurr, 1992)

Used with permission of the National Middle School Association

Read each of the following statements. Decide whether you **AGREE** or **DISAGREE**. Write your response and then write a brief statement explaining your decision.

1. Improvement of student learning occurs when activities are academically focused with clearly stated outcomes and teaching episodes structured in small steps with substantial opportunity for students to practice skills. I _____ because

2. There are, in the end, only two main ways human beings learn, by observing others (directly or vicariously) and by trying things out for themselves. I _____ because

3. Students will be likely to learn if they are given many opportunities to select materials they want to work with and are able to choose the questions they want to pursue. I _____ because

4. If a student is having fun with an activity, learning is taking place. I _____ because

5. Intellectual growth and development take place through a sequence of concrete experiences (real life) followed by more conceptual understanding (abstractions). I _____ because

6. Little or no knowledge exists that is essential for everyone to acquire. I _____ because

7. Students learn best when teachers are enthusiastic, knowledgeable, and present information in a clear and organized fashion. I _____ because

Activity #4A

Narrative Vignette

1. What goals for student learning does this teacher seem to have?

2. Describe the strategies that the teacher uses to reach these goals. (What kinds of learning experiences are students engaged in?)

3. Has assessment been built into the learning experiences? If so, how?

4. Based on what you have read, what would you say this teacher believes about student learning? Write a brief belief statement for this teacher.

Activity #4B

Video Vignette—Observation and Analysis

Record your observation in the left column of the form. In the right hand column, write an analysis of these observations using the questions at the top of the column as a guide.

Observations	Analysis
What is the teacher doing/saying? What are the students doing/saying? What do you notice about the physical environment?	How would this teacher describe his or her role? What does this teacher believe about the nature of knowledge? What metaphor might characterize this teaching?

Activity #5

Creating the Team Portrait of Teaching Practice

As a faculty who will be trying to construct or work with a cohesive curriculum that meets the needs of a diverse group of students, teams need time to learn about each other as teachers. This is a time for teams to work together to understand where their ideas come together and where there might be points of departure. Teams need to develop a depiction of common practices in the school.

1. Each member should read his or her narrative of teaching practice and clarify any confusions that the team may have. However, this is not a time to discuss reactions to the narrative.

2. As team members listen to each narrative, they should record their observations about areas of agreement or disagreement, questions that arise, and points that will need clarification.

3. After all members have shared their portraits of teaching practice, the team should discuss their observations and identify issues or themes relevant to teaching, learning, and curriculum that emerge, e.g., student choice, engagement in learning, matching assessment to instruction, teacher content knowledge, etc.

4. The team now constructs a Team Portrait based on what emerges as a picture of teaching practice for the team as a whole. Team Portraits will be used to further examine beliefs about learning and teaching.

Activity #6

Portraits of Teaching Practice and Beliefs About Learning and Teaching

1. In your teams, review the depiction of the team teaching practice. Based on this description of teaching practice, identify beliefs that might be the basis for these practices. For example, perhaps the team or a member of your team regularly uses small group problem-based projects—what does this say about beliefs, about knowledge, about how people learn, about the student's role in learning, and about the teacher's role in learning?

2. After you have identified beliefs, categorize them—for example, beliefs about how students learn to write effectively; beliefs about aspects of math content to be stressed; beliefs about allowing student choice in curriculum, etc. Record your belief statements on chart paper .

3. As you review your belief statements, decide which beliefs are shared by the whole group. Use green marker to identify beliefs that are shared and red marker for those are not unanimously held by the group.

Activity #7

Jigsaw: Theories of Learning

Part IA

We will work in "expert" groups, reading, responding, and preparing to help our team groups understand the ideas in the reading selections. The reading selections describe and illustrate several ways of explaining the way human beings learn. As you read the selections, you might consider:

What important factors about learning and teaching are discussed?

Do they make sense in terms of your experience?

How do the factors optimize learning for students?

Can you think of examples of these ideas from your own experience?

What questions came up for you as you read the selection?

Part IB

In the expert group, share your thoughts about the readings. The stimulus questions in Part IA may be a good starting point. It is important that everyone in the group have a clear understanding of the ideas, since group members will be "teaching" this material to members of the team or "home" groups. Pens and paper are available at your tables to develop any visuals that would seem helpful when presentations are made to team groups.

Part II

Each member will present information from the articles discussed in the expert groups. Visual aids and examples that illustrate ideas may be helpful.

Part III

Sharing with the whole group: Which ideas really clicked for you? Which ideas are still puzzling for you? Which ideas do you want to explore further?